

30. (new) The apparatus as set forth in claim 20 further comprising means for monitoring weight loss of the rubber in each of the distillation chambers as a result of pyrolysis.

31. (new) The apparatus as set forth in claim 30 wherein each weight loss monitoring means comprises a load cell.

32. (new) The apparatus as set forth in claim 20 wherein the heating means associated with each distillation chamber comprises radiant heating tubes in which a mixture of a hydrocarbon and an oxygen-containing gas is combusted.

33. (new) The apparatus as set forth in claim 32 wherein the oxygen-containing gas is air.

34. (new) The apparatus as set forth in claim 21 wherein the heating means associated with said distillation chamber comprises radiant heating tubes in which a mixture of a hydrocarbon and an oxygen-containing gas is combusted.

35. (new) The apparatus as set forth in claim 34 wherein the oxygen-containing gas is air.